

THE ROLE OF SATISFACTION AS MEDIATING FACTOR BETWEEN PERCEIVED SERVICE QUALITY AND LOYALTY

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Abstract

This study introduces satisfaction as a mediating factor between perceived service quality and customer loyalty. To confirm its role as a mediator, this study compared results between the no use and the use of satisfaction in a model. This study takes 155 customers of a bakery branch located in Jakarta respondents and this study uses path analysis technique to measure the mediating effect. The result shows that satisfaction mediates nicely to the model and while it plays as a mediating factor, perceived service quality significantly affect to customer loyalty with indirect relationship. The comparison result with the no-use of mediating factor shows that the role of satisfaction as mediating factor increases the power or explanation.

Keywords: perceived service quality, satisfaction, loyalty, mediating role

Abstrak

Penelitian ini mengajukan kepuasan sebagai faktor mediasi antara persepsi kualitas layanan dan loyalitas pelanggan. Untuk mengkonfirmasi peran kepuasan sebagai sebuah mediator, penelitian ini membandingkan hasil antara model yang menggunakan kepuasan sebagai mediator dan model yang tidak menggunakan. Penelitian ini mengambil 155 pelanggan sebuah toko roti di Jakarta sebagai responden dan penelitian ini menggunakan tehnik analisis jalur untuk mengukur efek mediasi. Hasil menunjukkan bahwa kepuasan melakukan fungsi mediasi dengan baik dan pada waktu yang sama, persepsi kualitas layanan berpengaruh signifikan terhadap loyalitas pelanggan. Hasil perbandingan dengan model non mediasi menunjukkan bahwa peran kepuasan sebagai faktor mediasi meningkatkan kekuatan penjelasan dari model.

Kata kunci: perceived service quality, satisfaction, loyalty, mediating role

JEL Classification: M30, M31

1. Introduction

To win competition, one important factor should be considered is having customer loyalty to our product (Hartono 2008; and Griffin 2005). A lot of research has been done in customer loyalty area to describe its magnitude towards winning the competition, namely Kassim and Abdullah (2010); Reichheld and Schefter (2000); and Semejin et al. (2005). A company should be able to deliver a good service quality to its customers and it can strengthen its position in the future as a result (Rangkuti 2008; Tsukatos and Rand 2006).

Research in behavioral science establishes a couple of measurement variables for service quality concept as well as loyalty (Parasuraman, 1985). In doing so, many of research had used indirect relation between satisfactions as independent variables to loyalty as dependent variables. For example, Lee (2010) has researched the effect of satisfaction to loyalty at internet banking in Korea; Akbar et al. (2010) did their satisfaction and loyalty study at hospitals in Malaysia, and Floh and Treiblmaier (2006) research satisfaction and loyalty in internet banking in Austria. They used satisfaction as mediating variable between loyalty and service quality because it is

believed that satisfaction behavior is faster and it is more directly to be collected. Satisfaction can be measured by comparing between customer expectation and experience, or asking customers whether they have good experience when buying and consuming a product/service (Brady and Cronin 2001; Zeithaml, Berry and Parasuraman 1996; Parasuraman, Zeithaml, and Berry 1985; and Gronroos 1982).

This research aims to analyse relationship between perceived service qualities to customer loyalty. As an addition to the existing research work in the similar area, customer satisfaction factor was imposed as a mediating variable that is believed can strengthen customer loyalty. The rest of this paper will be sequentially developed from giving theoretical background of the study, explaining the method used for the work and the selection of research object, presenting the results as well as analyzing them, and finally discussing the implication delivering some suggestions according to the result and discussion.

2. Literature Review

2.1. Perceived Service Quality

While the meaning of satisfaction and perceived service quality might be interpreted to be similar, some researches showed that both words are different in quality. Satisfaction, argued by Bitner (1990), is related closely but not the same as attitude toward the service. Satisfaction refers to more individual experience while attitude is more general and similar between individuals' attitude towards the firm (Bitner 1990). Parasuraman, Zeithaml, and Berry (1988) defined perceived service quality as "the customers' overall impression of the relative inferiority/superiority of a service provider and its services." Tjiptono (2009) stated that service quality focuses on the effort to satisfy customer need and deliver the services promptly in the effort to cope with customer expectation.

Furthermore, Brady and Cronin (2001) developed a comprehensive theoretical framework about service quality. Brady and Cronin (2001) argued that perceived service quality should be reduced due to some researches that failed to acknowledge the five dimensions from Parasuraman, Zeithaml and Berry (1994) as direct determinants of service quality (for example, see Babakus and Boller 1992; Carman 1990; Dabholkar, Shepperd, and Thorpe 2000; Frost and Kumar 2000; Llosa, Chandon, and Orsingher 1998; Mels, Boshoff, and Nell 1997; Booms and Bitner 1981; McDougal and Levesque 1994). As a result, they proposed three condensed dimensions of perceived service quality, i.e.: (a) interaction quality (IQ), (b) physical environment quality (EQ), and (c) outcome quality (OQ). Interaction quality refers to attitude, behavior and expertise from actor in the service quality field. Physical environment deals with situation such as ambient condition, design and social factors that also becomes part of the service quality delivery. Finally, outcome quality refers to what customers get when the service are finished. These includes factors such as waiting time, tangibles, and valence. This research uses the three perceived service quality sub-variables as mentioned above (IQ, EQ, and OQ).

2.2. Customer Satisfaction

Generally, Customer Satisfaction can be referred as the match situation between expectations and experience (Hasan, 2009 and Musanto, 2004). It is a fulfillment response from customer towards pleasure level of consumption-related of product/service (Lee, 2010 and Oliver, 1997). Given that, it can be argued that satisfaction is a form of attitude that can be assessed throughout the usage of a product or service (Caruana 2002). It is expectations reflect anticipated performance during delivery of service or transactions (Churcill and Suprenant 1982). It is a post decision construct of buying decision (Caruana, Money, and Berthon 2000; Bolton and Drew 1991; Cronin and Taylor 1994).

Caruana (2002), as also noted previously by Parasuraman, Zeithaml, and Bery (1994), stated that there is arguably concept of interchanging between service quality and satisfaction.

Caruana's study (2000) found distinction between the concept of service quality and loyalty. It is found that that satisfaction does work as a mediator between service quality and customer loyalty.

As such, Rangkuti (2008) argued that customer satisfaction becomes an increasingly interesting feature to be researched. Customer will create various level of satisfaction or dissatisfaction after consuming a product or service. A satisfied consumer is willing to pay more, giving recommendation to others, and become loyal. Expectation can be established into a standard measurement to evaluate service quality performance (Kotler and Keller 2006).

2.3. Customer Loyalty

The biggest challenge for marketers is not only deal with how to deliver their service/product to their customers excellently but also to retain their customers and to create loyal customers as well as maintaining interaction with the marketers. Kotler (2005) defined that customer loyalty is a commitment to do repurchase in the future although there is possible options to divert.

Loyalty also can be seen in the brand point of view. A comprehensive definition of brand loyalty provided by Jacoby and Kyner (1973) defines loyalty is a form of (a) biased (non-random), (b) a behavior response, (c) expressed over time, (d) particular decision making unit, (e) with respect to one or more alternative brands out of a set of such brands, and (f) a function of evaluative processes.

Jones and Sasser (1995) noted that customer loyalty is the intention to maintain relationship between customers and service players. Therefore, customer loyalty refers to customer attitude to purchase goods/service over time. Zeithaml, Berry and Parasuraman (1996) added some dimensions to measure customer loyalty such as giving recommendation to other people, level of complaint, willingness to pay more, and possibility to switch to other products.

Further, Darsono and Wellyan (2009) stated that loyalty consists of two dimensions, i.e.: behavioral and loyalty. Behavioral refers to action to purchase and repurchase while attitude refers to psychological commitment towards an object. It is believed that loyalty is psychological condition related to attitude towards products. Loyalty is built from belief, likeness, and decision to buy product (Jacoby and Kyner 1973; Kim and Yoon 2000).

2.4. Research Model and Hypotheses Development

As said before, Customer Satisfaction were imposed as mediating variable between Perceived Service Quality and Customer Loyalty. It is expected that Perceived Service Quality together with Customer Satisfaction has positive impact to customer satisfaction. Therefore:

H₁: Perceived service quality has direct significant impact to customer loyalty

However, as said previously, it is also hypothesized that satisfaction can increase the relation between perceived service quality and customer loyalty. Hence, by using customer satisfaction as mediating factor this research argue that:

H₂: Perceived service quality has significant impact to customer loyalty with customer satisfaction as mediating factor.

H₃: The presence of mediating factor strengthens the impact of perceived service quality to customer loyalty.

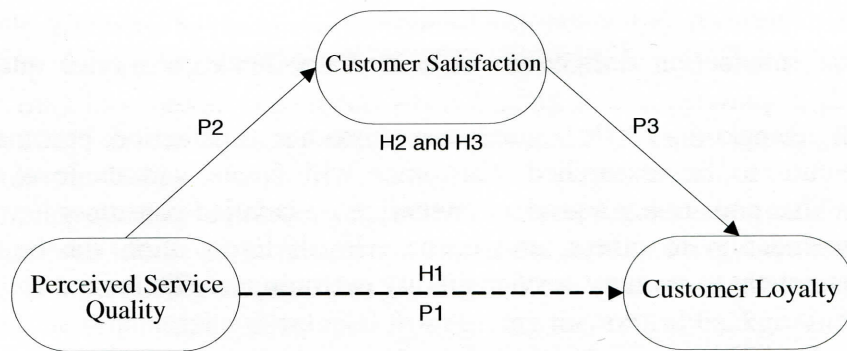


Figure 1. Research Framework

3. Research Method

This research used the suggested questions from Brady and Cronin (2001) to measure the perceived service quality variable. This research also adopted some questions from Oliver and Swan (1998) to define customer satisfaction variable and some questions from Caruana (2002) to describe customer loyalty variable. Some interpretation questions were taken from Tjiptono, Chandra and Diana (2004) and Tjiptono (2009) to be implied in the questionnaire. Overall, this research used 31 questions with six item scale ranging from strongly disagree (1) to strongly agree (6). A full set of question list is attached (in Indonesian language) in Appendix 1.

This research developed three developed sub independent variables, i.e.: interaction quality (IQ), physical environment quality (EQ), and Outcome Quality (OQ) and they define independent variable, i.e.: perceived service quality (Brady and Cronin 2001). Second, customer satisfaction (CS) function as mediating variable is a situation where a satisfied customer is willing to pay, re-buy and recommend to other people (Caruana 2002; Cronin and Taylor 1994). Finally customer loyalty (CL) function as dependent variable is a situation where a loyal customer is willing to do a repurchase and committed to the product (Darsono and Wellyan 2009; Kim and Yoon 2000; Jacoby and Kyner 1973).

The data collection took place in a certain period of time (2 weeks). The participants for this research are customers from a local bakery store located in west Jakarta, Indonesia. This bakery is a branch from an international brand bakery from the USA. They have a motto: “more than just a cake”. By saying this motto, it is inferred that the bakery pursues to deliver their best service to its customers. Hence, this is a good example to verify the motto implied in its service quality of the bakery meets the expectation of its customers. In addition to the questionnaire, this research also performed qualitative interview with the management of the store to add necessary information about the store itself. The selection process for the participants is done using snowball technique and there were 155 participants selected for this study (Hair et al. 2006, Sekaran 2003). All answers were tabulated into the system and a pre-test was performed to validate the questions.

Before doing further analysis, validity check (KMO) and reliability test (Cronbach Alpha) have been done to validate the data. The result were good (Cronbach alpha > 0.7 and KMO > 0.5, see Rochaety, Tresnaty, and Latief 2009, Uyanto 2006, and Solimun 2002). Hence, the data can be used for further analysis. The result of validity and reliability test is attached in Appendix 2.

This study used descriptive statistic tools to mapping our participant characterisitic and mean score was used to view tendency of our respondent behavior towards the service quality of our reseach object. Lastly, path analysis was used to find out relationship among the three investigated variables (for similar study see Tsoukatos and Rand 2006).

P(n) is standardized beta coefficient to be used for the path analysis (see figure 1 – Research model). P1 is beta between perceived service quality and customer loyalty, P2 is beta between perceived service quality and customer satisfaction, and P3 is beta between customer

satisfaction and customer loyalty. Hence, the mediating effect is a calculation of $P1 + (P2 * P3)$ (Ghozali 2006).

4. Result and Discussion

4.1. Descriptive and Mean Score results

Table 1. Descriptive Information about The Participants

No	Respondent Information	Frequency	Percent
1	Sex		
	Male	47	30.3
	Female	108	69.7
2	Frequency to visit the store per month		
	1x	42	27.1
	2x	66	42.6
	3x	34	21.9
	4x and more	14	8.4
3	Expenditure per month (IDR)		
	< 1 million	11	7.1
	1 million - 2 million	83	53.5
	2 million - 3 million	45	29
	> 3 million	16	10.3

According to Table 1, participant customers from the bakery store mostly are females (69%). The participants (males and females) averagely visit the bakery store twice a month in the first place and once in a month in the following position. Also, it can be claimed that our participants life style mostly are middle range family as their expenditure mostly range between IDR. 1 million – 2 million in the first place and IDR. 2 million – 3 million in the second place. From the data, it can be inferred the average expenditure for middle range income family in Jakarta is between IDR 2 million – 4 million per month.

Table 2. Mean Score Result

Element		Highest Score		Lowest Score		Mean Score
Interaction quality	5.135	Quick response	4.761	Willingness to help		4.922
Physical environment quality	4.471	Deliver good impression	4.200	Safe and secure from crime action		4.361
Outcome quality	5.052	Happy with its delivery	4.716	Has physical facilities needed		4.865
OMS service quality						4.716
Customer satisfaction						4.761
Customer loyalty						4.844

Furthermore, this research found out that the overall mean score for service quality is good (4.865 out of 6). The lowest mean score is in the physical environment quality (specifically about the safety issue). The highest mean score is in the interaction quality (specifically the quick response to the customer problem). This result is quite opposite with the one founded in Brady and Cronin (2001). In reverse, they found that physical environment was in the highest position followed by outcome and interaction in the second and third place. It is argued the explanation of

this opposite finding is due to the cultural and external factors. Most Asian cultures are engaged more closely in human relation contact and they have higher rate of empathy to social group compared to Western culture. It is also argued that external environment also take place in the customer perception about physical environment. The object used in this study located in the central of Jakarta, a big city with high population density, heavy congestion, and high crime. These factors may affect the perception. Further, the overall score for perceived service quality, customer satisfaction, and customer loyalty is quite high. According to these numbers, our respondents responded quite positively to overall quality, satisfied with the service and tend to be loyal.

4.2. Path Analysis Result

In doing path analysis, three linear regression equations were created based on the mean score result (α is 5%). First equation built is perceived service quality as independent variable (X) and customer satisfaction (Y). Second equation uses perceived service quality (X1) and customer satisfaction (X2) to customer loyalty (Y). The third equation uses perceived service quality (X) and customer loyalty (Y). The result of the three equations is displayed in Table 3.

Table 3. Regression Result

Components	Regression 1		Regression 2		Regression 3	
	MCS = f(MSQ)		MCL = f(MSQ, MCS)		MCL = f(MSQ)	
	Value	P-Val	Value	P-Val	Value	P-Val
R ²	0.493		0.481		0.243	
F	149.046	0.000	70.425	0.000	49.129	0.000
Constant	-1.118		1.569		0.827	
MSQ	1.243	0.000	0.02	0.888		
Std-MSQ	P2 = 0.702		P1 = 0.012			
MCS			0.664	0.000	0.845	0.000
Std-MCS			P3 = 0.685		0.493	

Notes

MCS = Mean Score Customer Satisfaction
MSQ = Mean Score Service Quality
MCL = Mean Score Customer Loyalty

From the above regression results, all of them are in good shape in terms of overall model (F-value). Both regression 1 and 2 brings better R² result than regression 3. It can be argued that the mediating role of customer satisfaction can lead into a better customer loyalty. In the t-test result, however, the MSQ in regression 2 does not result in significant value to the equation. It is as expected by the theoretical framework that supposedly the MSQ should relate to MCS directly and MCL indirectly.

To perform path analysis (regression 1 and 2), standardized independent variables from the two equations were used. According to the proposed research model (Figure 1), the P1 is 0.012 (standardized MSQ – regression 2), the P2 is 0.702 (standardized MSQ – regression 1), and p3 is 0.685 (standardized MCL – regression 2). Thus, the result now can be expressed in Figure 2.

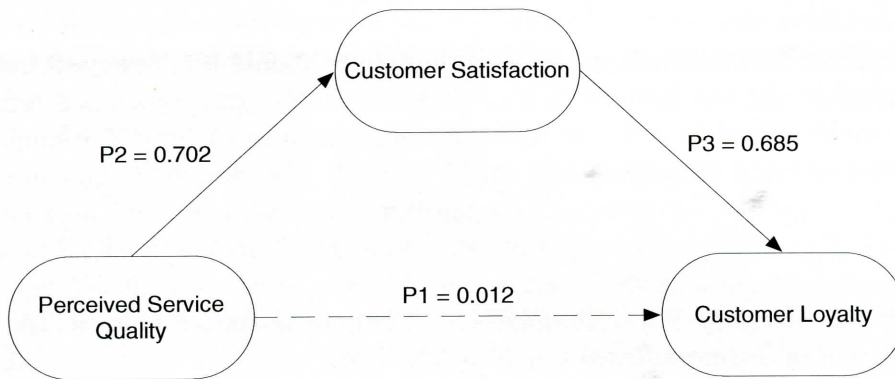


Figure 2. Path Values

According to the finding, perceived service quality cannot directly affect loyalty but using customer satisfactions mediating factor. The magnitude of the indirect relation can be calculated as the summation of $P1 + (P2 * P3)$, given the amount is $0.012 + (0.702 * 0.685) = 0.493$. The relationship, as described from the result, is positive. The mediating coefficient (0.493) is larger than direct relationship between $P1$ (0.012).

According to the result, the result of regression 3 proves that direct relation between perceived service quality and loyalty is less powerful than both regression 1 and 2 combined ($P3 < \text{mediating coefficient}$). Therefore, it can be inferred that by doing good service, a company can create satisfied customers and the higher satisfaction of customers will result in better loyalty. Reversely, dissatisfied customers can create negative impact to loyalty. All variables have positive relationship. It can be concluded that the three hypotheses are confirmed. The result also supports the work of Caruana (2002) which claimed that customer satisfaction can function as a positive mediator between perceived service quality and customer loyalty.

4.3. Implications and Recommendations

According to the result, it can be argued that the role of satisfaction in delivering customer loyalty plays an important role. In addition to the path analysis result, the OMS result also shows that in overall customer's answers fall in good range criteria (scale 6) about the interaction, physical and outcome quality.

This result adds some implications in the theoretical framework. Given loyalty factor is difficult to obtain at speed, it is easier to establish factors that can contribute satisfaction. As the finding of this study proves that satisfaction is a good mediator to satisfaction, researchers can focus on what elements can contribute to strengthen satisfaction. This study also confirms the result of its predecessors that segregate satisfaction and service quality (Caruana 2002) and determines the role of satisfaction as mediating factor (e.g.: Caruana 2002, Floh and Treiblmaier 2006; Kasim and Abdullah 2010).

In business application, the focus on satisfaction can be developed by establishing some factors that customers consider as important matters. Our Overall Mean Score result, for example, shows that quick response to problem and empathy as two leading factors to create satisfaction. It is also important for organizations establish a monitoring service satisfaction level. This can be done in numerous ways, such as establish a questionnaire to assess the customer satisfaction level, or having mystery guests to check its service. All of these efforts are being done in the effort of ensuring their customer expectation meets the service and the store can do corrective and necessary actions as soon as possible if something wrong happens. By doing that, according to the model result, loyalty increases as well as the satisfaction grows. This is a logic consequence since the model also defines that while a customer who satisfied with the store's service quality can lead the customer to buy more (or doing repurchase action) and as a result the customer becomes committed to the store.

Last but not least, this study acknowledges some imperfections as a result of time, budget, and scope limitation. This research suggests further study should be done with larger number of samples to strengthen the result magnitude. This research also recommends a series of study in other service industry field in order to achieve understanding of how this mediating variable behaves over various types of industry.

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Appendixes

Appendix 1: Question List (in Indonesian language)

Group	Questions
IQ	<div>1. Secara keseluruhan, saya menilai kualitas interaksi saya dengan para karyawan toko roti “X” bagus sekali.</div> <div>2. Saya bisa berkeyakinan bahwa para karyawan di toko roti “X” bersikap bersahabat.</div> <div>3. Sikap para karyawan toko roti “X” menunjukkan kesediaan mereka untuk membantu saya.</div> <div>4. Sikap karyawan toko roti “X” menunjukkan kepada saya bahwa mereka memahami kebutuhan saya.</div> <div>5. Saya bias mengandalkan para karyawan toko roti “X” dalam mengambil tindakan untuk memenuhi kebutuhan saya.</div> <div>6. Para karyawan toko roti “X” merespon kebutuhan saya dengan cepat.</div> <div>7. Perilaku para karyawan toko roti “X” menunjukkan kepada saya bahwa mereka memahami kebutuhan saya.</div> <div>8. Saya meyakini bahwa para karyawan toko roti “X” memahami pekerjaan mereka.</div> <div>9. Para karyawan toko roti “X” mampu menjawab pertanyaan-pertanyaan saya secara langsung ketika pertanyaan diajukan.</div>
EQ	<div>1. Menurut saya, lingkungan fisik toko roti “X” tergolong aman (dari tindakan kriminalitas).</div> <div>2. Suasana di toko roti “X” persis seperti yang saya harapkan dari sebuah restoran.</div> <div>3. Toko roti “X” memahami bahwa suasana penting bagi saya.</div> <div>4. Tata letak ruang makan penyedia jasa ini tidak pernah gagal memberikan kesan baik bagi saya.</div> <div>5. Toko roti “X” memahami bahwa desain ruangan penting bagi saya.</div> <div>6. Saya merasa bahwa para pelanggan toko roti “X” yang lain secara konsisten memberikan kesan baik bagi saya tentang layanannya.</div>
OQ	<div>1. Saya selalu memiliki pengalaman sangat baik setiap kali berkunjung ke toko roti “X”.</div> <div>2. Saya merasa senang dengan apa yang diberikan toko roti “X” kepada para pelanggannya.</div> <div>3. Toko roti “X” berusaha menjaga agar waktu tunggu saya minimum.</div> <div>4. Saya secara konsisten senang dengan fasilitas fisik di toko roti “X”.</div> <div>5. Saya suka toko roti “X” karena mereka memiliki fasilitas fisik yang saya butuhkan.</div> <div>6. Toko roti “X” memahami tipe fasilitas fisik yang diinginkan para pelanggannya.</div> <div>7. Toko roti “X” memahami tipe fasilitas fisik yang diinginkan para pelanggannya.</div> <div>8. Toko roti “X” berusaha memberikan pengalaman layanan yang baik kepada saya.</div>
CS	<div>1. Saya merasa puas secara keseluruhan dengan kualitas jasa toko roti “X”.</div> <div>2. Bertransaksi dengan toko roti “X” merupakan pilihan yang bijaksana.</div> <div>3. Kualitas jasa toko roti “X” merupakan hasil kerja yang baik.</div> <div>4. Kualitas jasa toko roti “X” sesuai dengan harapan saya.</div>
CL	<div>1. Saya bersedia melakukan pembelian produk toko roti “X” secara teratur atau reguler.</div> <div>2. Saya selalu merekomendasikan toko roti “X” kepada teman atau kerabat.</div> <div>3. Saya tidak terpengaruh terhadap bujukan promosi dari pesaing sejenis.</div> <div>4. Saya mengajak teman atau kerabat untuk menggunakan toko roti “X”.</div>

Notes: IQ = Interaction Quality; EQ = Environment Quality; OQ = Outcome Quality; CS = Customer Satisfaction; CL = Customer Loyalty

Appendix 2: Reliability (Cronbach Alpha) and Validity (KMO) result**IQ**

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.820	.818	9

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.814
Bartlett's Test of Sphericity	Approx. Chi-Square	529.533
	df	36
	Sig.	.000

EQ

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.936	.940	6

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.845
Bartlett's Test of Sphericity	Approx. Chi-Square	933.129
	df	15
	Sig.	.000

OQ

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.781	.779	7

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.769
Bartlett's Test of Sphericity	Approx. Chi-Square	275.422
	df	21
	Sig.	.000

CS

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.808	.804	4

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.743
Bartlett's Test of Sphericity	Approx. Chi-Square	237.706
	df	6
	Sig.	.000

CL

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.782	.785	5

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.806
Bartlett's Test of Sphericity	Approx. Chi-Square	204.655
	df	10
	Sig.	.000